CLAIMS

What is claimed is:

1	1.	A method for previewing an electronic document, the method comprising:
2		generating the electronic document at a client;
3		transmitting document information associated with the electronic document
4		from the client to a printing device;
5		generating preview document data at the printing device based on the
6		document information and a set of one or more specific
7		characteristics associated with the printing device, wherein the set of
8		one or more specific characteristics are unavailable at the client;
9		transmitting the preview document data to the client from the printing
0		device; and
1		previewing the electronic document at the client based on the preview
2		document data received from the printing device.
1	2.	The method as recited in Claim 1, wherein:
2		the printing device is a multi-functional printer (MFP); and
3		the step of transmitting document information includes transmitting
4		document information to the MFP.
1	3.	The method as recited in Claim 1, wherein:
2		the document information is Page Description Language (PDL) data; and
3		the step of transmitting document information includes transmitting PDL
4		data from the client to the printing device

1	4.	The method as recited in claim I, wherein the step of generating preview
2	•	document data at the printing device includes generating raster image data at
3		the printing device based upon the document information and the set of one
4		or more specific characteristics associated with the printing device.
1	5.	The method as recited in claim 1, wherein the step of generating preview
2 ·		document data at the printing device includes generating a bitmap image at
3		the printing device based upon the document information and the set of one
4		or more specific characteristics associated with the printing device.
1	6.	The method as recited in Claim 1, wherein
2		the printing device is associated with one or more different paper
3		characteristics that are available for printing electronic documents;
4		and
5		the set of one or more specific characteristics associated with the printing
6	·	device includes one or more of the one or more different paper
7		characteristics that are available for printing electronic documents.
1	7.	The method as recited in Claim 6, wherein the one or more different paper
2		characteristics includes one or more paper type characteristics, wherein the
3		one or more paper type characteristics indicate a specific type of paper that
4		has been for printing the electronic document.
1.	8.	The method as recited in Claim 6, wherein the one or more different paper

characteristics includes one or more paper color characteristics, wherein the

2

3		one or more paper color characteristics indicate a specific color of paper that
4		has been for printing the electronic document.
1	9.	The method as recited in Claim 1, wherein
2		the printing device supports one or more different fonts that are available for
3		printing electronic documents; and
4		the set of one or more specific characteristics associated with the printing
5		device includes one or more of the one or more different fonts that are
6		available for printing electronic documents.
1	10.	The method as recited in Claim 1, wherein
2		the printing device is associated with one or more different stapling
3		characteristics that are available for selection; and
4	•	the set of one or more specific characteristics associated with the printing
5		device includes one or more of the one or more different stapling
6		characteristics that are available for selection.
1	11.	The method as recited in Claim 1, wherein
2		the printing device is associated with one or more different finishing
3 ·		characteristics that are available for selection; and
4	,	the set of one or more specific characteristics associated with the printing
5	,	device includes one or more of the one or more different finishing
6		characteristics that are available for selection.
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2		the client includes a print driver that is associated with the printing device;
3		and
4		the set of one or more specific characteristics that are unavailable at the client
5		includes one or more characteristics that are unknown to the print
6		driver.
1	13.	The method as recited in Claim 1, wherein
2		the client includes a print driver that is associated with the printing device,
3		wherein the print driver is associated with one or more print driver
4		attributes that are not supported by the printing device; and
5		the step of generating preview document data at the printing device includes
6		the step of translating one or more of the one or more print driver
7		attributes into one or more printing device attributes that are
8		supported by the printing device.
1	14.	The method as recited in Claim 1, wherein the step of generating preview
2		document data at the printing device further includes the steps of:
3		determining the resolution of a display device that is associated with the
4		client; and
5		generating the preview document data based on the resolution of the display
6		device.
1	15.	The method as recited in Claim 1, wherein
2		the step of generating preview document data at the printing device

3		includes the steps of generating two-dimensional (2-D) preview document
4		data; and
5		the step of displaying the preview version of the electronic document
6		includes the step of displaying portions of the electronic document at
7		the client in 2-D.
1	16.	The method as recited in Claim 1, wherein
2		the step of generating preview document data at the printing device
3		includes the steps of generating three-dimensional (3-D) preview document
4		data; and
5		the step of displaying the preview version of the electronic document
6		includes the step of displaying portions of the electronic document at
7		the client in 3-D.
1	17.	The method as recited in Claim 1, wherein
2		the step of generating preview document data at the printing device includes
3		the steps of generating HyperText Markup Language (HTML) data a
4		the printing device; and
5		the step of transmitting the preview document data to the client includes the
6		step of transmitting the HTML data to the client from the printing
7		device.
1	18.	The method as recited in Claim 1, wherein

2		the step of generating preview document data at the printing device includes
3		the steps of generating Extensible Markup, Language (XML) data at
4		the printing device; and
5 ·		the step of transmitting the preview document data to the client includes the
6		step of transmitting the XML data to the client from the printing
7		device.
1	19.	A method for previewing an electronic document, the method comprising:
2		receiving from a client at a printing device document information associated
3		with an electronic document;
4		generating preview document data at the printing device based on the
5		document information and a set of one or more specific
6		characteristics associated with the printing device; and
7		transmitting to the client the preview document data for causing a display
8		unit associated with the client to display a preview version of the
9		electronic document.
1	20.	The method as recited in Claim 19, wherein:
2		the document information is Page Description Language (PDL) data; and
3		the step of receiving document information includes receiving PDL data at
4		the printing device.
1	21.	The method as recited in claim 19, wherein the step of generating preview
2		document data at the printing device includes generating raster image data at

3		the printing device based upon the document information and the set of one
4		or more specific characteristics associated with the printing device.
1	22.	The method as recited in Claim 19, wherein
2		the printing device is associated with one or more different paper
3		characteristics that are available for printing electronic documents;
4		and
5		the set of one or more specific characteristics associated with the printing
6		device includes one or more of the one or more different paper
7		characteristics that are available for printing electronic documents.
1	23.	The method as recited in Claim 19, wherein
2		the printing device is associated with one or more different finishing
3		characteristics that are available for selection; and
4		the set of one or more specific characteristics associated with the printing
5		device includes one or more of the one or more different finishing
6		characteristics that are available for selection.
1	24.	The method as recited in Claim 19, wherein the step of generating preview
2		document data at the printing device further includes the steps of:
3		determining a display resolution of the display device that is associated with
4		the client; and
5		generating the preview document data based on the display resolution of the
6		display device

25.	The method as recred in Claim 19, wherein
	the step of generating preview document data at the printing device
	includes generating three-dimensional (3-D) preview document data; and
	the step of transmitting to the client the preview document data includes
	transmitting preview document data that causes the preview version
	of the electronic document to be displayed in 3-D on the display unit
	associated with the client.
26.	A computer-readable medium carrying one or more sequences of instructions
	for previewing an electronic document, wherein execution of the one or more
	sequences of instructions by one or more processors causes the one or more
	processors to perform:
	generating the electronic document at a client;
	transmitting document information associated with the electronic document
	from the client to a printing device;
	generating preview document data at the printing device based on the
	document information and a set of one or more specific
	characteristics associated with the printing device, wherein the set of
	one or more specific characteristics are unavailable at the client;
	transmitting the preview document data to the client from the printing
	device; and
	26.

	displaying a preview version of the electronic document at the client based
•	on the preview document data that is received from the printing
	device.
27.	A system for previewing an electronic document, comprising:
	one or more processors;
	one or more memories coupled to the one or more processors; and
	one or more sequences of instructions stored in the one or more memories,
	wherein execution of the one or more sequences of instructions by
	one or more processors causes the one or more processors to perform
	the steps of:
	receiving from a client at a printing device document information
	associated with said electronic document;
	generating preview document data at the printing device based on the
	document information and a set of one or more specific
	characteristics associated with the printing device, wherein the
	set of one or more specific characteristics are unavailable at
	the client;
	transmitting the preview document data to the client from the printing
	device for displaying a preview version of the electronic
	document at said client.
28.	An document preview apparatus comprising:

2	a memory for storing characteristics that are associated with the document
3	preview apparatus, wherein the characteristics are unavailable to
4	clients that are connected to the document preview apparatus; and
5	one or more processors that are configured for
6	receiving from the client document information associated with an
7	electronic document;
8	generating preview document data based on the document
9	information and one or more of the characteristics associated
10	with the document preview apparatus; and
11	transmitting to the client the preview document data for causing a
12	display unit associated with the client to display a preview
13	version of the electronic document.